

APPENDIX E

Sample Agency Report Information

APPENDIX E-1

Sample Community Transit Reports

MONTHLY SYSTEM PERFORMANCE REPORT

SEPTEMBER 1998

S265R

SYSTEM SUMMARY STATISTICS SEPTEMBER 1998

	Fixed Route					DART	Vanpool	SYSTEM		
	Local	In-County Commuter	UW	Intercounty Commuter	Total	YTD	Total	Total	TOTAL	YTD
Service Provided										
Days of Service	30	21	25	25	30	273	30	21	30	273
Revenue Hours	17,693	1,258	1,827	6,170	26,947	237,435	6,931	6,026	39,904	353,530
Revenue Miles	335,313	32,305	37,617	149,539	554,773	4,893,671	123,781	277,978	956,532	8,475,747
Service Consumed										
Total Boardings	325,569	27,409	34,386	201,633	588,997	5,464,453	14,816	52,082	655,895	6,084,817
Average Weekday Boardings	13,120	1,305	1,613	9,496	25,534	235,341	643	2,480	28,657	263,999
Average Saturday Boardings	6,697	na	130	555	7,382	65,588	194	na	7,576	67,109
Average Sunday Boardings	4,534	na	na	na	4,534	38,743	134	na	4,667	40,064
Average Holiday Boardings	5,129	na	na	na	5,129	20,308	included in total	na	5,129	20,308
Performance Measures										
Total Boardings/Revenue Hour	18.4	21.8	18.8	32.7	21.9	23.0	2.1	8.6	16.4	17.2
Total Boardings/Revenue Mile	0.97	0.85	0.91	1.35	1.06	1.12	0.12	0.19	0.69	0.72

NA = Not Available na = not applicable

* = Estimated Totals

S266R

**SYSTEM RIDERSHIP COMPARISON
SEPTEMBER 1998/SEPTEMBER 1997**

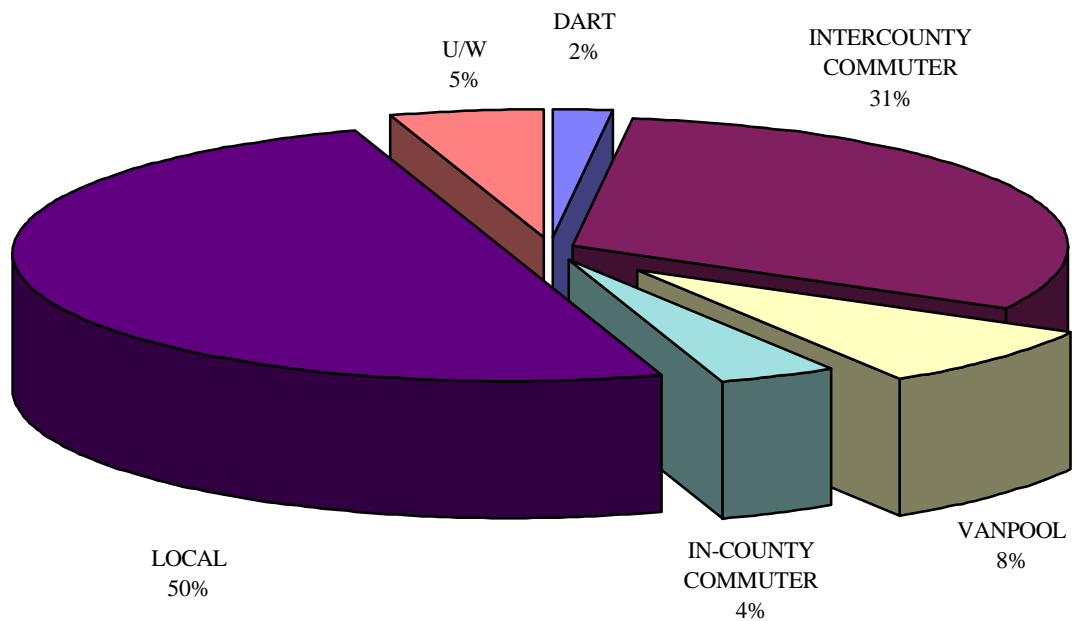
TOTAL BOARDINGS			
	1998	1997	(%) Change
LOCAL	325,569	323,995	0.5%
IN-COUNTY COMMUTER	27,409	31,630	-13.3%
U OF W	34,386	37,239	-7.7%
INTERCOUNTY COMMUTER	201,633	200,380	0.6%
DART	14,816	13,216	12.1%
VANPOOL	52,082	50,501	3.1%
SYSTEM TOTAL	655,895	656,961	-0.2%
SYSTEM YTD	6,084,817	5,972,109	1.9%

AVERAGE DAILY BOARDINGS			
WEEKDAY			
	1998	1997	(%) Change
LOCAL	13,120	12,930	1.5%
IN-COUNTY COMMUTER	1,305	1,506	-13.3%
U OF W	1,613	1,738	-7.2%
INTERCOUNTY COMMUTER	9,496	9,425	0.8%
DART	643	578	11.2%
VANPOOL	2,480	2,405	3.1%
SATURDAY			
	1998	1997	(%) Change
LOCAL	6,697	6,972	-3.9%
IN-COUNTY COMMUTER	na	na	0.0%
U OF W	130	183	-29.0%
INTERCOUNTY COMMUTER	555	615	-9.8%
DART	194	134	44.7%
VANPOOL	na	na	0.0%
SUNDAY			
	1998	1997	(%) Change
LOCAL	4,534	4,658	-2.7%
IN-COUNTY COMMUTER	na	na	0.0%
U OF W	na	na	0.0%
INTERCOUNTY COMMUTER	na	na	0.0%
DART	134	133	0.2%
VANPOOL	na	na	0.0%

NA = Not Available na = not applicable

* = Estimated Totals for current year

**SYSTEM RIDERSHIP DISTRIBUTION
TOTAL BOARDINGS FOR SEPTEMBER 1998**



* = Estimated Totals

MONTHLY SYSTEM PERFORMANCE REPORT

SEPTEMBER 1998

S267R

SYSTEM TOTAL RIDERSHIP YEAR END 1995 thru SEPTEMBER 1998

MONTH	LOCAL	IN-COUNTY COMMUTER	U/W	INTERCOUNTY COMMUTER	DART	VANPOOL	TOTAL	YTD TOTAL
1995 TOTALS	2,810,473	209,435**	586,485	2,065,370	143,388	216,405	6,031,556	6,031,556
--1996--								
JANUARY	285,532	23,010	64,200	193,919	11,508	28,018	606,187	606,187
FEBRUARY	266,013	20,067	56,230	183,581	12,183	28,044	566,118	1,172,305
MARCH	291,028	19,104	49,504	186,800	13,248	30,137	589,821	1,762,126
APRIL	321,064	21,485	63,216	195,057	13,712	31,379	645,913	2,408,039
MAY	318,475	19,754	57,988	196,319	13,330	32,507	638,373	3,046,412
JUNE	304,242	18,653	38,947	182,997	11,528	30,116	586,483	3,632,895
JULY	319,446	19,831	44,715	197,730	12,387	31,745	625,854	4,258,749
AUGUST	313,620	18,568	37,318	195,545	12,070	32,306	609,427	4,868,176
SEPTEMBER	299,349	19,211	35,589	186,132	11,583	31,802	583,666	5,451,842
OCTOBER	353,933	24,121	69,423	219,576	13,661	38,857	719,571	6,171,413
NOVEMBER	304,715	21,884	52,179	177,487	10,596	32,645	599,506	6,770,919
DECEMBER (N)	270,081	19,000	39,538	169,857	10,286	31,246	540,008	7,310,927
TOTAL	3,647,498	244,688	608,847	2,285,000	146,092	378,802	7,310,927	7,310,927
--1997--								
JANUARY	343,133	29,351	58,472	208,621	12,169	43,170	694,916	694,916
FEBRUARY	318,285	27,360	52,152	186,365	11,642	42,157	637,961	1,332,877
MARCH	329,832	28,651	47,385	202,904	13,112	44,968	666,852	1,999,729
APRIL	343,183	29,016	56,625	209,185	13,588	45,557	697,154	2,696,883
MAY	335,814	27,813	51,336	201,372	13,452	44,547	674,334	3,371,217
JUNE	325,709	29,590	40,835	201,721	12,692	44,289	654,836	4,026,053
JULY	328,482	29,826	42,949	205,168	13,441	46,629	666,495	4,692,548
AUGUST	306,410	28,273	35,095	191,787	12,661	48,374	622,600	5,315,148
SEPTEMBER	323,995	31,630	37,239	200,380	13,216	50,501	656,961	5,972,109
OCTOBER	360,174	37,177	67,197	224,277***	15,498	56,955	761,278	6,733,387
NOVEMBER	312,875	30,357	48,327	177,381	12,900	46,453	628,293	7,361,680
DECEMBER	318,200	28,129	41,934	195,480	14,374	48,523	646,640	8,008,320
TOTAL	3,946,092	357,173	579,546	2,404,641	158,745	562,123	8,008,320	8,008,320
--1998--								
JANUARY	338,728	35,092	55,165	200,903	14,200	55,439	699,527	699,527
FEBRUARY	320,087	32,410	51,786	191,725	13,827	53,119	662,954	1,362,481
MARCH	349,070	34,080	50,156	218,215	15,691	59,003	726,215	2,088,696
APRIL	359,344	31,844	54,904	213,219	15,315	56,652	731,278	2,819,974
MAY	344,411	27,632	48,101	192,634	14,223	51,125	678,126	3,498,100
JUNE	323,301	30,287	40,575	208,844	15,147	55,068	673,222	4,171,322
JULY	300,138	27,265	36,331	210,601	15,100	53,726	643,161	4,814,483
AUGUST	293,901	25,495	32,727	196,485	14,898	50,933	614,439	5,428,922
SEPTEMBER	325,569	27,409	34,386	201,633	14,816	52,082	655,895	6,084,817
OCTOBER							0	0
NOVEMBER							0	0
DECEMBER							0	0
TOTAL	2,954,549	271,514	404,131	1,834,259	133,217	487,147	6,084,817	6,084,817

* = Estimated Totals

** = Boeing Strike : Started October 6, 1995.

Boeing Strike: Ended December 13, 1995.

*** = 10 additional trips added to Route 418 for Mariner Playoff games.

(N) = Severe Winter Storm hit Puget Sound Region December 26 - December 31, 1996 impacting ridership and service on all routes.

MONTHLY SYSTEM
PERFORMANCE REPORT

SEPTEMBER 1998

RL270R

ROUTE LEVEL TOTAL BOARDINGS
SEPTEMBER 1996/SEPTEMBER 1997/SEPTEMBER 1998

Local Boardings			
ROUTE	Total Boardings		
	1996(N)	1997	1998
110	5,609	5,399	7,764
120	13,982	12,291	11,588
140	15,935	19,230	19,101
150	2,045	1,755	1,939
160	19,172	21,266	19,255
170	24,687	27,825	26,158
180	12,611	13,256	12,956
190	3,798	4,991	4,575
210	34,576	33,704	32,354
220	4,256	4,297	4,020
222	na	na	1,442
240	4,617	4,998	5,158
250	na	729	1,364
260	1,602	1,904	2,299
261	na	285	1,546
280	8,860	9,925	9,297
610	63,995	63,684	65,859
611	99	843	554
620	33,692	36,084	34,087
621	12,647	15,473	16,269
630	13,952	16,093	15,785
710	635	7,340	8,773
720	18,683	18,552	19,579
760	533	430	603
C11	858	980	756
C23	2,505	2,661	2,488

Intercounty Commuter Boardings			
ROUTE	Total Boardings		
	1996(N)	1997	1998
401	31,614	33,904	33,668
403	13,945	15,256	13,668
404	5,938	5,957	5,918
405	5,345	6,291	6,306
407	3,046	3,834	3,989
408	9,804	12,054	10,440
409	11,526	11,404	11,686
411	22,392	25,697	23,967
412	9,182	9,954	13,385
416	10,293	10,867	11,201
418	12,782	12,887	12,627
420	4,784	4,948	4,630
421	5,492	7,370	8,375
422	3,922	4,182	3,639
424	4,970	4,114	3,969
430	7,365	6,598	6,928
435	4,538	5,811	8,100
441	1,213	1,402	1,277
442	1,072	903	928
477	9,760	9,773	9,777
SNO Local	2,840	3,248	3,414
SEA Local	4,309	3,926	3,741

U of W Boardings			
ROUTE	Total Boardings		
	1996(N)	1997	1998
810	5,966	6,006	5,387
840	580	805	366
850	5,497	5,852	5,013
855	8,162	8,787	8,450
860	6,783	7,442	6,590
870	3,121	3,440	3,829
875	1,813	1,434	1,256
880	3,667	3,473	3,495

na = not applicable

(N) = Severe Winter Storm hit Puget Sound Region December 26 - December 31, 1996
impacting ridership and service on all routes.

In-county Commuter Boardings			
ROUTE	Total Boardings		
	1996(N)	1997	1998
147	1,163	2,079	1,801
157	1,295	2,189	2,075
187	1,023	1,906	1,809
207	1,814	2,156	2,330
217	1,176	1,843	1,561
227	2,008	2,896	2,767
247	5,390	7,525	5,853
257	na	1,502	924
287	1,315	3,114	2,704
617	681	1,234	1,059
727	2,595	4,000	3,380
767	751	1,186	1,146

MONTHLY SYSTEM
PERFORMANCE REPORT

SEPTEMBER 1998

RL271R

ROUTE LEVEL PRODUCTIVITY
AVERAGE WEEKDAY BOARDINGS
SEPTEMBER 1996/SEPTEMBER 1997/SEPTEMBER 1998

Local Boardings			
ROUTE	Average Weekday Boardings		
	1996(N)	1997	1998
110	235	214	321
120	580	513	483
140	704	821	832
150	102	84	92
160	763	840	763
170	965	1,098	1,019
180	535	546	531
190	190	238	218
210	1,430	1,329	1,300
220	177	162	158
222	na	na	50
240	194	211	206
250	na	35	65
260	64	81	102
261	na	13	67
280	355	391	364
610	2,552	2,459	2,558
611	0*	0*	0*
620	1,249	1,312	1,289
621	632	737	775
630	567	648	640
710	27	306	363
720	735	715	752
760	27	20	29
C11	43	47	36
C23	109	110	105

Intercounty Commuter Boardings			
ROUTE	Average Weekday Boardings		
	1996(N)	1997	1998
401	1,581	1,614	1,603
403	697	726	651
404	297	284	282
405	267	300	300
407	152	183	190
408	490	574	497
409	576	543	556
411	1,120	1,224	1,141
412	459	474	637
416	515	517	533
418	527	504	503
420	239	236	220
421	275	351	399
422	196	199	173
424	249	196	189
430	368	314	330
435	227	277	386
441	61	67	61
442	54	43	44
477	488	465	466
SNO Local	139	151	158
SEA Local	211	183	175

U of W Boardings			
ROUTE	Average Weekday Boardings		
	1996(N)	1997	1998
810	261	251	232
840	29	38	17
850	275	279	239
855	408	418	402
860	339	354	314
870	156	164	182
875	91	68	60
880	183	165	166

na = not applicable

* = Route does not operate on weekdays

(N) = Severe Winter Storm hit Puget Sound Region December 26 - December 31, 1996 impacting ridership and service on all routes.

In-county Commuter Boardings			
ROUTE	Average Weekday Boardings		
	1996(N)	1997	1998
147	58	99	86
157	65	104	99
187	51	91	86
207	91	103	111
217	59	88	74
227	100	138	132
247	270	358	279
257	na	72	44
287	66	148	129
617	34	59	50
727	130	190	161
767	38	56	55

MONTHLY SYSTEM
PERFORMANCE REPORT

SEPTEMBER 1998

RL272R

ROUTE LEVEL PRODUCTIVITY
WEEKDAY BOARDINGS/REVENUE HOUR
SEPTEMBER 1996/SEPTEMBER 1997/SEPTEMBER 1998

Local Boardings			
ROUTE	Weekday Boardings/Revenue Hour		
	1996(N)	1997	1998
110	17.6	15.8	18.2
120	11.8	9.9	9.4
140	22.0	25.9	26.2
150	12.8	10.5	11.4
160	16.6	17.2	15.6
170	22.1	23.9	22.2
180	25.1	25.7	25.0
190	12.1	14.2	12.0
210	33.9	30.5	28.9
220	16.3	14.9	14.0
222	na	na	10.2
240	9.7	10.3	9.8
250	na	3.3	6.5
260	5.9	7.4	7.6
261	na	4.2	6.3
280	13.0	14.4	13.2
610	41.9	39.1	30.5
611	0*	0*	0*
620	27.0	30.4	26.6
621	19.7	24.8	22.0
630	18.6	21.2	16.0
710	2.3	7.7	9.3
720	19.6	18.3	18.1
760	13.6	9.9	8.9
C11	2.1	3.0	2.5
C23	5.9	5.8	5.6

Intercounty Commuter Boardings			
ROUTE	Weekday Boardings/Revenue Hour		
	1996(N)	1997	1998
401	45.6	46.9	45.9
403	40.5	42.2	40.6
404	27.2	26.1	26.0
405	20.6	23.2	23.2
407	24.8	29.6	31.0
408	39.9	46.7	40.5
409	35.6	33.5	34.4
411	30.9	33.8	31.6
412	38.6	39.8	42.9
416	31.2	31.3	32.4
418	28.2	26.0	24.9
420	25.2	24.9	23.3
421	31.4	28.3	30.8
422	22.2	22.9	20.0
424	21.5	17.0	16.5
430	35.8	30.5	32.1
435	31.7	32.7	29.8
441	15.6	17.1	14.2
442	11.7	9.3	9.6
477	29.2	27.9	28.0

U of W Boardings			
ROUTE	Weekday Boardings/Revenue Hour		
	1996(N)	1997	1998
810	12.2	11.2	10.2
840	32.2	41.7	19.0
850	26.1	24.8	21.3
855	31.8	30.1	28.9
860	25.3	25.1	22.3
870	16.5	16.8	18.4
875	37.9	26.0	22.8
880	23.8	20.3	20.4

na = not applicable

* = Route does not operate on weekdays

(N) = Severe Winter Storm hit Puget Sound Region December 26 - December 31, 1996 impacting ridership and service on all routes.

In-county Commuter Boardings			
ROUTE	Weekday Boardings/Revenue Hour		
	1996(N)	1997	1998
147	10.0	16.8	14.2
157	11.6	18.7	17.3
187	9.0	15.8	14.4
207	31.3	35.3	36.6
217	10.9	25.5	21.4
227	27.5	36.6	34.1
247	31.0	39.4	31.3
257	na	32.0	21.8
287	12.9	28.9	24.2
617	10.5	19.3	14.2
727	14.0	20.4	16.9
767	17.1	24.9	21.7

APPENDIX E-2

Sample King County Reports

KING COUNTY REVENUE PASSENGER TRIPS AUGUST 1998									
Description	Budget	Actual August 1998	Average Week 1998	Adjusted August 1997	Percent Increase/ Decrease	Budget	Actual YTD 1998	Actual YTD 1997	Percent Increase/ Decrease
Cash- 1 zone peak		634,726	151,125	692,925	(8.4)		5,286,212	5,447,013	(3.0)
1 zone off-peak		881,114	198,881	988,053	(10.8)		7,074,327	7,309,568	(3.2)
2 zone peak		228,283	54,353	246,086	(7.2)		1,883,906	1,933,789	(2.6)
2 zone off-peak		106,528	24,372	117,303	(9.2)		855,083	879,385	(2.8)
Total Cash Riders		1,850,651	428,732	2,044,367	(9.5)		15,099,528	15,569,755	(3.0)
Pass- 1 zone peak	a)	1,181,471	273,947	1,181,241	0.0		9,791,870	10,136,066	(3.4)
1 zone off-peak		116,321	26,972	147,844	(21.3)		1,006,705	1,121,617	(10.2)
2 zone peak		504,528	116,986	527,721	(4.4)		4,086,307	4,200,186	(2.7)
2 zone off-peak		14,578	3,380	14,647	(0.5)		120,585	117,464	2.7
U-passes		453,932	106,793	434,075	4.6		5,262,723	5,095,004	3.3
Total Passes		2,270,830	528,078	2,305,528	(1.5)		20,268,190	20,670,337	(1.9)
All day pass		56,210	11,242	64,678	(13.1)		364,478	414,740	(12.1)
Transfers		206,112	47,340	229,354	(10.1)		1,670,564	1,727,987	(3.3)
Custom bus		36,588	8,484	36,743	(0.4)		370,654	350,785	5.7
Elderly/handicap cash		315,086	72,072	350,477	(10.1)		2,547,288	2,628,602	(3.1)
Elderly/handicap pass		578,745	134,188	592,476	(2.3)		4,674,520	4,720,882	(1.0)
School Passes	b)	68,532	15,881	N/A	N/A		694,741	N/A	N/A
Ride Free Zone		639,077	148,389	635,443	0.6		5,053,465	5,024,729	0.6
Other Contract	c)	271,062	62,687	182,990	48.1		1,733,776	883,588	96.2
Waterfront Streetcar		40,213	8,962	44,518	(9.7)		153,654	164,517	(6.6)
Total		6,646,187	6,333,104	6,486,574	(2.4)	52,541,669	52,630,858	52,155,922	0.9
Vanpool	d)	247,884	59,020	250,483	(1.0)		1,966,741	1,901,120	3.5

a) 1-zone peak rides in the pass category are down in 1998 when compared with 1997 data due to a change in reporting school pass rides which are removed from 1-zone peak and placed in a separate category.

b) Beginning January 1998 school pass rides are reported from farebox data. Before January 1998 school pass rides were calculated as 1-zone peak rides by the ridership model. 1997 data were not changed.

c) Other Contracts includes Flexpass 220,597, KC/Metro Employee 87,476. (KC/Metro employee rides are based on farebox data), Mariners 12,261, Emerald Downs 842, Torchlight Parade 12,978, Water Taxi (Bus) 2,821, Water Taxi (Boat) 12,921, W.A.R.T. Van 117 Summer School 972, Torchlight Parade 12,978, Seafair Hydro Shuttle 45,753, Seahawk Shuttle 4,510

d) Vanpool ridership was estimated.

Notes: Interagency Pass rides for Pierce and Community Transit are reported together, 1-zone peak rides 3,383, 2-zone peak rides 4,363

**King County
Daily Passenger Rides
AUGUST 1998**

CASH RIDERS	ALL DAY PASS	TRANS- FERS	PASSES	CUSTOM BUS	E/H CASH	E/H PASSES	RIDE FREE	SCHOOL PASSES	OTHER CONTRACT	WATERFT ST'CAR	TOTAL SYSTEM	VANPOOL
43,941	7,898	6,628	40,455	729	11,427	11,547	11,830	1,483	17,266	2,229	155,432	0
28,690	5,426	3,966	25,674	466	6,593	7,395	7,972	1,073	3,305	1,616	92,177	0
68,791	0	7,179	92,390	1,458	10,630	23,049	25,717	3,170	11,490	1,332	245,205	11,804
80,405	0	8,399	92,390	1,458	12,421	23,049	25,717	3,458	11,490	1,535	260,321	11,804
78,721	0	8,222	92,390	1,458	12,161	23,049	25,717	4,201	10,376	1,089	257,383	11,804
78,547	0	8,203	92,390	1,458	12,134	23,049	25,717	4,142	10,376	1,246	257,262	11,804
70,274	0	7,334	92,390	1,458	10,859	23,049	25,717	4,127	10,376	1,611	247,195	11,804
37,095	6,836	5,595	40,455	729	9,647	11,547	11,830	1,527	5,429	2,256	132,946	0
26,176	4,638	3,618	25,674	466	6,016	7,395	7,972	1,075	2,191	1,217	86,439	0
78,942	0	8,245	92,390	1,458	12,195	23,049	25,717	3,089	10,182	1,159	256,426	11,804
77,154	0	8,057	92,390	1,458	11,920	23,049	25,717	3,057	10,182	1,059	254,043	11,804
76,077	0	7,944	92,390	1,458	11,754	23,049	25,717	3,062	10,182	1,060	252,693	11,804
71,695	0	7,484	92,390	1,458	11,078	23,049	25,717	2,908	10,182	1,059	247,019	11,804
71,104	0	7,422	92,390	1,458	10,987	23,049	25,717	2,842	10,182	1,315	246,465	11,804
33,681	5,782	5,080	40,455	729	8,759	11,547	11,830	1,338	3,090	1,535	123,826	0
22,450	3,836	3,103	25,674	466	5,159	7,395	7,972	884	2,107	950	79,997	0
67,228	0	7,014	92,390	1,458	10,389	23,049	25,717	2,236	11,285	1,167	241,933	11,804
72,908	0	7,611	92,390	1,458	11,265	23,049	25,717	2,379	11,285	1,142	249,204	11,804
74,391	0	7,767	92,390	1,458	11,494	23,049	25,717	2,331	11,285	1,223	251,105	11,804
70,120	0	7,318	92,390	1,458	10,835	23,049	25,717	2,222	11,285	1,377	245,771	11,804
75,499	0	7,883	92,390	1,458	11,664	23,049	25,717	2,091	11,285	1,487	252,523	11,804
37,029	6,390	5,585	40,455	729	9,630	11,547	11,830	1,084	6,543	2,260	133,082	0
25,840	4,918	3,572	25,674	466	5,938	7,395	7,972	906	3,305	1,677	87,664	0
66,086	0	6,895	92,390	1,458	10,213	23,049	25,717	1,876	10,171	1,100	238,954	11,804
72,505	0	7,569	92,390	1,458	11,203	23,049	25,717	1,963	10,171	716	246,741	11,804
72,658	0	7,585	92,390	1,458	11,226	23,049	25,717	2,046	10,171	735	247,035	11,804
70,454	0	7,353	92,390	1,458	10,887	23,049	25,717	1,979	10,171	837	244,295	11,804
75,400	0	7,873	92,390	1,458	11,649	23,049	25,717	2,099	10,171	1,128	250,934	11,804
34,192	6,184	5,157	40,455	729	8,892	11,547	11,830	1,203	3,174	1,257	124,620	0
23,266	4,302	3,216	25,674	466	5,347	7,395	7,972	867	2,191	1,093	81,790	0
69,334	0	7,236	92,390	1,458	10,714	23,049	25,717	1,814	10,171	746	242,628	11,804
1,850,653	56,210	206,112	2,270,830	36,588	315,086	578,745	639,077	68,532	271,062	40,213	6,333,107	247,884

**KING COUNTY
COMPARISON OF PASSES IN USE**

		August-98	August-97	Diff	YTD August-98	YTD August-97	Diff
MONTHLY & 3-MONTH PASSES							
One Zone Peak	a)	15,229	16,417	(1,188)	131,024	146,429	(15,405)
Two Zone Peak	a)	6,898	7,939	(1,041)	59,348	64,207	(4,859)
One Zone Off Peak		2,102	2,099	3	18,871	18,884	(13)
Two Zone Off Peak		292	303	(11)	2,492	2,459	33
Custom Bus		866	852	14	8,762	8,163	599
Cross Sound or Ferry Passes		1,108	996	112	9,346	7,909	1,437
One Zone 3-Month Passes		2,789	2,496	293	25,193	20,367	4,826
Two Zone 3-Month Passes		1,357	1,266	91	11,827	10,284	1,543
U-pass (all zones)		25,282	24,179	1,103	294,611	285,400	9,211
School Passes		1,451	0	1,451	25,328	0	25,328
SCCD Go Pass (all zones)		370	292	78	6,740	5,990	750
Interagency Passes	b)	455	0	455	2,335	0	2,335
SUBTOTAL		58,199	56,839	1,360	595,877	570,092	25,785
ANNUAL PASSES							
Regular:							
One Zone Peak		1,588	721	867	10,227	5,814	4,413
Two Zone Peak		702	340	362	4,309	2,781	1,528
One Zone Off Peak		113	44	69	586	387	199
Two Zone Off Peak		10	4	6	62	32	30
Subsidized:							
One Zone Peak		4,199	3,877	322	32,502	29,769	2,733
Two Zone Peak	c)	38,367	21,633	16,734	293,416	165,660	127,756
One Zone Off Peak		148	129	19	1,089	1,006	83
Two Zone Off Peak		16	14	2	120	109	11
First Hill Express		181	166	15	1,407	1,237	170
SUBTOTAL		45,324	26,928	18,396	343,718	206,795	136,923
SUBTOTAL FULL FARE PASSES		103,523	83,767	19,756	939,595	776,887	162,708
Less: Vanpool Exchange		3,283	3,438	(155)	27,104	27,308	(204)
TOTAL FULL FARE PASSES		100,240	80,329	19,911	912,491	749,579	162,912
REDUCED FARE PASSES							
Monthly RF Passes		12,093	12,435	(342)	99,455	100,866	(1,411)
Monthly Access Passes		887	681	206	6,983	2,835	4,148
Regular Annual RF Passes		3,476	3,544	(68)	27,941	28,388	(447)
Seafirst Annual RF Passes		65	16	49	517	129	388
City of Seattle Annual RF Passes		34	19	15	271	123	148
Swedish Annual RF Passes		18	19	(1)	140	142	(2)
Boeing Annual RF Passes		10	9	1	80	72	8
Safeco Annual RF Passes		13	10	3	101	79	22
SUBTOTAL REDUCED FARE PASSES		16,596	16,733	(137)	135,488	132,634	2,854
Less: Vanpool Exchange		5	0	5	(18)	1	(19)
TOTAL REDUCED FARE PASSES		16,591	16,733	(142)	135,506	132,633	2,873

a) These passes include the automatic teller machine (ATM) pass sale. There were 855 full pass equivalents for 1-zone peak and 392 full fare pass equivalents for 2-zone peak sold for this month. Total number of passes sold were 948 for 1-zone and 366 for 2-zone. 1-zone peak passes were down in 1998 when compared with 1997 because of the change in reporting school passes as a separate category. In 1997 school passes were reported as 1-zone peak passes. 1997 data for 1-zone peak passes has not changed.

b) Interagency Passes for Pierce and Community Transit are reported together.

c) Annual subsidized 2-zone peak passes include FlexPasses. There are 34,934 FlexPasses this month. Microsoft Flexpass for this month was 7,514. Combined KC/Metro Flexpasses 11,815, Youth passes 1,451.

d) Pass sold less refunds

APPENDIX E-3

Sample Kitsap Transit Reports

**KITSAP TRANSIT RIDERSHIP
RECAP**

September-98

SERVICE	PASSENGERS	YEAR TO DATE (9/98)	YTD 1997 (9/97)	PERCENT INCREASE
Routed Weekdays	280,804			
Routed Saturdays	24,917			
Routed Sundays	16,202			
TOTAL ROUTED SERVICE		321,923	2,993,927	3,036,481 -1%
TAXI PASSENGERS		1,035		
KITSAP TRANSIT ACCESS		21,898		
TOTAL KITSAP TRANSIT ACCESS		22,933	208,337	212,491 -2%
WORKER/DRIVER		25,785	259,926	315,835 -18%
VANPOOLS		20,237	213,453	216,125 -1%
SPECIAL SERVICE		1,782	40,638	37,743 8%
HORLUCK FERRY		37,455	288,411	307,732 -6%
GUARANTEED RIDE HOME		18	168	120 40%
SYSTEM TOTALS		430,133	4,004,860	4,126,527 -3%
TOTAL SMART COMMUTERS		77,339	742,991	624,301 19%

KITSAP TRANSIT MONTHLY COMPARISON REPORT
ROUTED SERVICE ROUTES

ROUTE	JAN '98	FEB '98	MAR '98	APR '98	MAY '98	JUNE '98	JULY '98	AUG '98	SEP '98	SEP '97	DIFF.	PERC. DIFF	YEAR TO DATE TOTAL
BREMERTON													
OLYMPIC COLLEGE	16186	19350	18719	16866	18459	14790	13993	12273	13937	15420	-1483	-9.6%	144573
PERRY AVENUE	11416	13173	11459	11899	11510	11600	11706	11443	11780	11572	208	1.8%	105986
TRENTON AVENUE	8068	9573	8856	8905	8946	8979	9249	9231	8799	7738	1061	13.7%	80606
EAST PARK	18190	21480	20631	19218	18612	17412	16599	16642	17377	17434	-57	-0.3%	166161
EXPRESS	50884	60988	52549	51340	52139	49361	46310	46829	47322	40932	6390	15.6%	457722
McWILLIAMS SHUTTLE	4484	4806	4918	4509	4254	6097	6036	6068	6861	4299	2562	59.6%	48033
NAVY YARD CITY	21125	26937	23873	21989	23815	21784	19157	18534	20818	19415	1403	7.2%	198032
KARIOTIS/TRACYTON	2506	2446	2772	2755	2728	2799	2737	2059	1581	1911	-330	-17.3%	22383
WEST PARK	20077	25393	21908	22034	21388	20357	19129	17167	18314	19452	-1138	-5.9%	185767
JACKSON PARK	1715	1045	751	1172	1322	1424	244	620	1019	1432	-413	-28.8%	9312
EASTSIDE SHUTTLE	0	0	0	0	0	971	2098	1860	1707	0	1707	NEW	6636
WESTSIDE SHUTTLE	0	0	0	0	0	1485	3044	2925	3030	0	3030	NEW	10484
SILVERDALE													
KITSAP MALL LIMITED	17393	20684	18465	18017	18070	17409	16585	16797	16616	15316	1300	8.5%	160036
SILVERDALE LIMITED	15622	18277	17713	16953	19700	17146	16218	16316	16350	16357	-7	0.0%	154295
SILVERDALE WEST	20532	25014	21513	20071	20940	20304	19810	19073	18606	16967	1639	9.7%	185863
BANGOR COMMUTER	634	692	985	853	883	743	618	456	541	615	-74	-12.0%	6405
BANGOR SHUTTLE	7378	8743	6137	5770	5968	7095	8675	7598	7360	5700	1660	29.1%	64724
POULSBO SILVERDALE	3307	4126	3965	3882	4055	4086	4429	4622	4427	3399	1028	30.2%	36899
SILVERDALE	2356	2594	2929	3109	2981	2675	2808	2500	2578	2477	101	4.1%	24530
BAINBRIDGE													
SILVERDALE SHUTTLE	4700	5706	5343	4906	5404	5542	6224	6312	5808	5114	694	13.6%	49945
PORT ORCHARD													
MULLENIX EXPRESS	3453	3332	3841	3684	3309	3583	3455	3221	3627	3670	-43	-1.2%	31505

[illegible]

KAT	834	722	855	894	794	800	952	871	904	695	209	30.1%	7626
BANGOR PSNS	1017	1022	643	941	1061	1198	430	706	925	830	95	11.4%	7943

ROUTED SERVICE	321180	369387	344711	334919	336531	330293	323823	311160	321923	300089	21834	7.3%	2993927
KITSAP TRANSIT ACCESS	22000	22006	24315	24066	21273	23708	24880	23156	22933	22481	452	2.0%	208337
SPECIAL SERVICE	4488	340	194	360	3387	2978	2973	24136	1782	823	959	116.5%	40638
WORKER/DRIVER SERVICE	34067	29886	33416	30543	27206	28747	25553	24723	25785	31356	-5571	-17.8%	259926
VAN POOLS	24660	24838	28646	26336	21267	25169	23202	19098	20237	23141	-2904	-12.5%	213453
HORLUCK FERRY	25984	25984	28188	27324	32165	32361	38996	39954	37455	31216	6239	20.0%	288411
GUARANTEED RIDE HOME	24	16	13	26	20	23	18	10	18	7	11	157.1%	168
	432403	472457	459483	443574	441849	443279	439445	442237	430133	409113	21020	5.1%	4004860

Operation:	JAN '98	FEB '98	MAR '98	APR '98	MAY '98	JUNE '98	JULY '98	AUG '98	SEP '98	SEP '97		TOTALS
Weekdays	20	19	22	22	20	22	22	21	21	21		189
Sundays or Holiday as Sunday	5	4	5	4	6	4	5	5	5	5		43
Saturdays	4	4	4	4	5	4	4	5	4	4		38
Holiday Sched. no PSNS	1	1	0	0	0	0	0	0	0	0		2
	30	28	31	30	31	30	31	31	30	30		272

APPENDIX E-4

Sample Pierce Transit Reports

Sept. 1998

Monthly Performance Summary

Name	1998 Ridership	1997 Ridership	Percent Change	Pass/ Mile	Pass/ Hour	Net Cost/ Pass	Farebox Recvry	Rating
10 Pearl St.	22189	21944	1.1%	2.47	26.98	1.87	20.8%	SAT
11 Pt. Defiance	27124	27421	-1.1%	2.17	21.08	2.53	16.2%	SAT
13 N. 30th St.	9985	10346	-3.5%	1.70	17.52	3.14	13.5%	MAR
16 UPS - TCC	24728	25346	-2.4%	2.35	22.96	2.28	17.7%	SAT
20 Grandview	6753	6094	10.8%	1.09	14.89	3.79	11.5%	SAT
25 6th Ave.	76253	74321	2.6%	5.71	45.76	0.90	35.2%	EXC
26 "K" St.	4420	4682	-5.6%	2.77	25.01	2.06	19.2%	EXC
27 S. 19th St.	50607	52628	-3.8%	3.63	31.72	1.52	24.4%	EXC
28 S. 12th Ave.	31432	30388	3.4%	3.27	27.61	1.82	21.2%	EXC
41 Portland Ave.	25368	25989	-2.4%	2.52	26.86	1.88	20.7%	EXC
42 McKinley Ave.	26945	26826	0.4%	3.38	33.32	1.42	25.6%	EXC
45 Parkland	23522	25043	-6.1%	2.08	23.66	2.20	18.2%	SAT
46 Pacific Ave.	64984	61232	6.1%	2.47	27.45	1.83	21.1%	SAT
48 Sheridan-M St.	37673	34445	9.4%	2.78	30.67	1.59	23.6%	EXC
50 N. Orchard	9333	9447	-1.2%	1.49	16.64	3.34	12.8%	MAR
51 Union Ave.	8667	9085	-4.6%	1.45	16.14	3.46	12.4%	MAR
52 TCC-Mall	26023	28136	-7.5%	3.87	33.66	1.40	25.9%	EXC
53 Manitou	43352	42711	1.5%	2.50	25.28	2.03	19.4%	EXC
54 38th St.	21142	20785	1.7%	2.60	28.76	1.72	22.1%	EXC
55 Parkland-Mall	24785	25211	-1.7%	2.70	29.94	1.64	23.0%	EXC
56 56th St.	17486	17367	0.7%	2.30	22.86	2.30	17.6%	SAT
57 Tacoma Mall	23716	21693	9.3%	2.57	23.97	2.17	18.4%	EXC
60 Tideflats	1680	1720	-2.3%	1.22	9.44	6.26	7.3%	MAR
61 Browns/Dash Pt	3478	3706	-6.2%	0.54	8.29	7.19	6.4%	UNSAT
111 Pt. Fosdick	1819	1490	22.1%	1.56	20.38	2.63	15.7%	SAT
112 Peacock Hill	4856	4392	10.6%	0.86	14.32	3.96	11.0%	SAT
113 Key Center	2763	2722	1.5%	0.40	7.23	8.31	5.6%	UNSAT
200 Bridgeport	30112	28770	4.7%	2.75	34.39	1.36	26.5%	EXC
202 72nd St.	31304	28297	10.6%	1.61	21.87	2.42	16.8%	SAT
204 Lakewood-PkInd	26339	26491	-0.6%	3.41	34.97	1.33	26.9%	EXC
206 Ft. Lewis	33553	34909	-3.9%	1.77	20.04	2.69	15.4%	SAT
210 Lakewood	67587	65237	3.6%	3.53	32.40	1.48	24.9%	EXC
212 Steilacoom	21240	20777	2.2%	2.96	28.95	1.71	22.3%	EXC
214 Washington	18722	15896	17.8%	2.71	28.93	1.71	22.3%	EXC
300 S. Tacoma Way	26640	25892	2.9%	2.15	22.21	2.38	17.1%	SAT
400 Puyallup	14242	14427	-1.3%	1.55	23.53	2.22	18.1%	SAT
402 Meridian	18140	15449	17.4%	1.39	18.92	2.88	14.6%	SAT
403 Orting	913	403	126.6%	0.76	8.55	6.96	6.6%	MAR
406 Buckley-Enclave	5270	5555	-5.1%	0.63	10.28	5.70	7.9%	MAR
407 Prairie Ridge	3637	3517	3.4%	0.63	8.28	7.20	6.4%	UNSAT
410 112th St.	14839	13980	6.1%	1.18	16.78	3.31	12.9%	SAT
500 Federal Way	44772	36881	21.4%	1.54	20.69	2.59	15.9%	SAT
Downtown Connector	5680	n/a	0.0%	1.09	9.36	6.32	7.2%	
Total Local	984073	951651	3.4%	2.28	25.16	2.04	19.4%	

Sept. 1998

Performance by Service Type

2 of 4

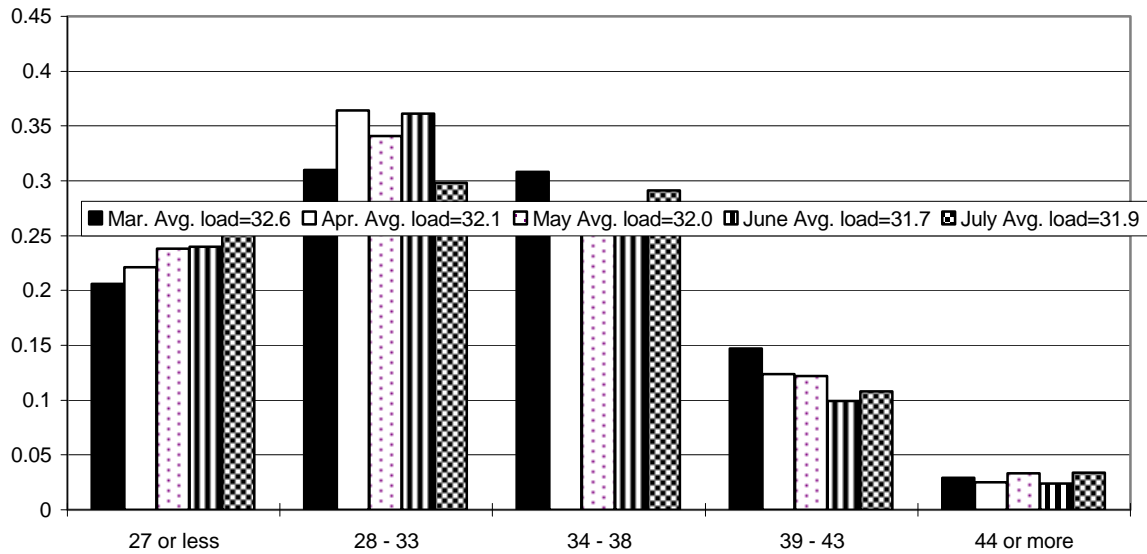
Arterial Routes:	Pass./ Hour	Pass./ Mile	Cost Recovery	Rating
25 6th Ave.	45.76 E	5.71 E	35.2% E	EXC
46 Pacific Ave.	27.45 S	2.47 S	21.1% S	SAT
200 Bridgeport	34.39 S	2.75 S	26.5% E	EXC
210 Lakewood	32.40 S	3.53 S	24.9% E	EXC
500 Federal Way	20.69 M	1.54 U	15.9% S	SAT
Total Arterial	30.98	2.87	23.8%	
Urban Routes:				
10 Pearl St.	26.98 S	2.47 S	20.8% S	SAT
11 Pt. Defiance	21.08 S	2.17 S	16.2% S	SAT
13 N. 30th St.	17.52 M	1.70 M	13.5% M	MAR
16 UPS - TCC	22.96 S	2.35 S	17.7% S	SAT
26 "K" St.	25.01 S	2.77 E	19.2% S	EXC
27 S. 19th St.	31.72 E	3.63 E	24.4% E	EXC
28 S. 12th Ave.	27.61 S	3.27 E	21.2% S	EXC
41 Portland Ave.	26.86 S	2.52 E	20.7% S	EXC
42 McKinley Ave.	33.32 E	3.38 E	25.6% E	EXC
45 Parkland	23.66 S	2.08 S	18.2% S	SAT
48 Sheridan-M St.	30.67 E	2.78 E	23.6% E	EXC
50 N. Orchard	16.64 M	1.49 M	12.8% M	MAR
51 Union Ave.	16.14 M	1.45 M	12.4% M	MAR
52 TCC-Mall	33.66 E	3.87 E	25.9% E	EXC
53 Manitou	25.28 S	2.50 E	19.4% S	EXC
54 38th St.	28.76 S	2.60 E	22.1% E	EXC
55 Parkland-Mall	29.94 S	2.70 E	23.0% E	EXC
56 56th St.	22.86 S	2.30 S	17.6% S	SAT
57 Tacoma Mall	23.97 S	2.57 E	18.4% S	EXC
202 72nd St.	21.87 S	1.61 M	16.8% S	SAT
204 Lakewood-Pkln	34.97 E	3.41 E	26.9% E	EXC
206 Ft. Lewis	20.04 S	1.77 S	15.4% S	SAT
212 Steilacoom	28.95 S	2.96 E	22.3% E	EXC
214 Washington	28.93 S	2.71 E	22.3% E	EXC
300 S. Tacoma Way	22.21 S	2.15 S	17.1% S	SAT
400 Puyallup	23.53 S	1.55 M	18.1% S	SAT
Total Urban Routes	25.64	2.44	19.7%	
Suburban Routes:				
20 Grandview	14.89 M	1.09 M	11.5% S	SAT
60 Tideflats	9.44 U	1.22 M	7.3% M	MAR
61 Browns/Dash Pt	8.29 U	0.54 U	6.4% U	UNSAT
111 Pt. Fosdick	20.38 S	1.56 S	15.7% S	SAT
112 Peacock Hill	14.32 M	0.86 M	11.0% S	SAT
113 Key Center	7.23 U	0.40 U	5.6% U	UNSAT
402 Meridian	18.92 S	1.39 S	14.6% S	SAT
403 Orting	8.55 U	0.76 M	6.6% U	MAR
406 Buckley-Enclaw	10.28 M	0.63 U	7.9% M	MAR
407 Prairie Ridge	8.28 U	0.63 U	6.4% U	UNSAT

Sept. 1998

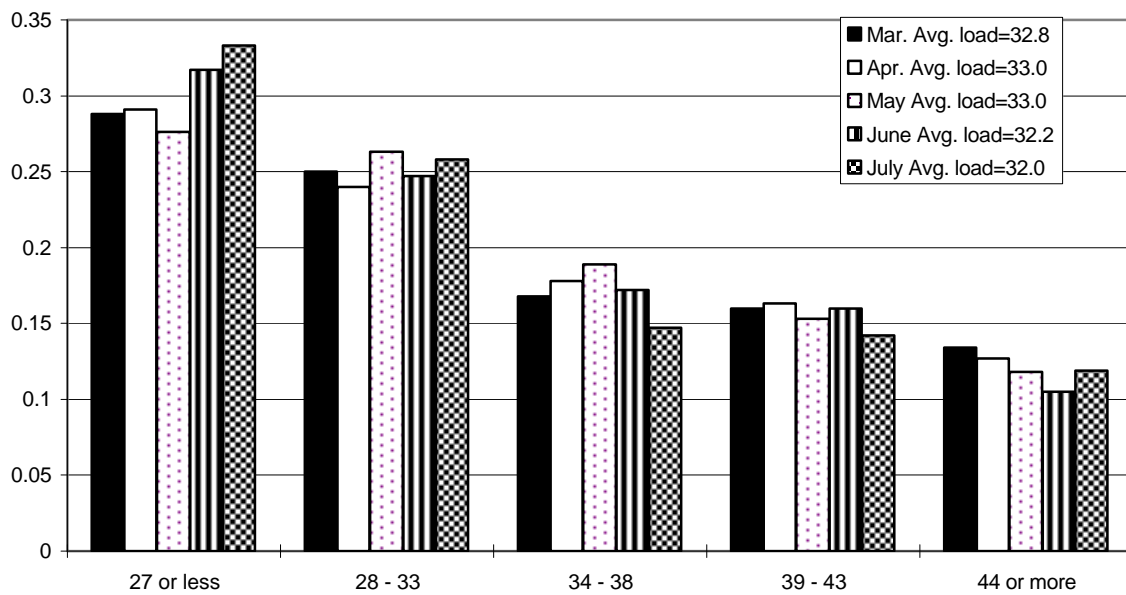
Average Daily Ridership

Name	Weekdays			Saturdays		
	1998	1997	% Change	1998	1997	% Change
10 Pearl St.	819	855	-4.2%	452	552	-18.1%
11 Pt. Defiance	1042	1086	-4.1%	737	688	7.2%
13 N. 30th St.	403	419	-3.9%	165	171	-3.4%
16 UPS - TCC	1014	1048	-3.3%	402	388	3.5%
20 Grandview	288	254	13.4%	176	191	-7.9%
25 6th Ave.	2971	2847	4.4%	1928	2050	-6.0%
26 "K" St.	210	223	-5.6%	0	0	0.0%
27 S. 19th St.	2075	2187	-5.1%	978	912	7.2%
28 S. 12th Ave.	1272	1245	2.2%	726	562	29.2%
41 Portland Ave.	958	981	-2.3%	732	720	1.7%
42 McKinley Ave.	1028	1051	-2.2%	728	695	4.7%
45 Parkland	944	1000	-5.6%	521	545	-4.4%
46 Pacific Ave.	2587	2409	7.4%	1465	1485	-1.4%
48 Sheridan-M St.	1486	1360	9.3%	846	803	5.3%
50 N. Orchard	382	399	-4.2%	182	142	27.8%
51 Union Ave.	330	346	-4.5%	239	263	-9.0%
52 TCC-Mall	1016	1062	-4.3%	755	801	-5.7%
53 Manitou	1716	1654	3.8%	1067	1130	-5.6%
54 38th St.	808	803	0.6%	605	552	9.5%
55 Parkland-Mall	941	952	-1.1%	731	788	-7.3%
56 56th St.	684	673	1.6%	436	429	1.6%
57 Tacoma Mall	889	828	7.4%	711	615	15.6%
60 Tideflats	80	82	-2.4%	0	0	0.0%
61 Browns/Dash Pt	154	149	3.5%	17	62	-72.2%
111 Pt. Fosdick	87	71	22.0%	0	0	0.0%
112 Peacock Hill	187	165	13.6%	140	111	25.7%
113 Key Center	108	106	2.2%	69	59	17.4%
200 Bridgeport	1179	1144	3.1%	803	649	23.8%
202 72nd St.	1247	1094	14.0%	634	815	-22.2%
204 Lakewood-PkInd	1028	1033	-0.5%	692	640	8.0%
206 Ft. Lewis	1232	1304	-5.6%	1098	1048	4.7%
210 Lakewood	2699	2551	5.8%	1513	1550	-2.4%
212 Steilacoom	835	819	2.0%	487	476	2.3%
214 Washington	757	644	17.5%	405	367	10.3%
300 S. Tacoma Way	1019	979	4.1%	784	837	-6.3%
400 Puyallup	555	554	0.2%	297	373	-20.4%
402 Meridian	723	597	21.1%	426	390	9.3%
403 Orting	43	19	128.8%	0	0	0.0%
406 Buckley-Enclave	193	194	-0.6%	157	179	-12.2%
407 Prairie Ridge	173	167	3.7%	0	0	0.0%
410 112th St.	533	482	10.6%	502	492	1.9%
500 Federal Way	1753	1438	21.9%	1107	942	17.5%
Downtown Connector	270	0	0.0%	0	0	0.0%
Total Local	38720	37276	3.9%	23710	23469	1.0%

Seattle Express Northbound Peak* Coach Loads
Mar. 1998 thru July 1998



Seattle Express Southbound Peak* Coach Loads
Mar. 1998 thru July 1998



Pass Distribution/Reconciliation For March 1998

RPT #	OUTLET	PT	SEN DIS	OLY EXP	OLY DIS	SEA EXP	SEA DIS	SUM YTH
981740	ALVA FED CREDIT UN	15	50	0	0	0	0	0
		-9	-15	0	0	0	0	0
981741	BOEING COMMUTER	300	0	10	0	15	0	0
		-62	0	-9	0	-7	0	0
981742	CITY OF TACOMA	200	15	0	0	0	0	0
		-83	-12	0	0	0	0	0
981743	FAMILY SERVICES	225	1	2	0	5	0	0
		-48	-1	-1	0	-2	0	0
981744	NW FED. CREDIT UN	0	0	0	0	20	0	0
		0	0	0	0	-3	0	0
981745	FRANK RUSSELL CO	200	3	1	0	20	0	0
		-6	0	0	0	-6	0	0
981746	GNA UNDERWRITER	0	0	0	0	10	0	0
		0	0	0	0	-6	0	0
981747	GROUP HEALTH - TA	20	0	3	0	0	0	0
		-7	0	-2	0	0	0	0
981748	GROUP HEALTH - SE	0	0	0	0	30	0	0
		0	0	0	0	-4	0	0
981749	HEALTH DEPARTMEN	15	0	5	0	5	0	0
		-5	0	-4	0	-3	0	0
981750	HEALTH RESOURCES	0	0	0	0	30	0	0
		0	0	0	0	-4	0	0
981751	INTEL	250	0	0	0	0	0	0
		-108	0	0	0	0	0	0
981752	JOBS - PUYALLUP	30	0	0	0	0	0	0
		-13	0	0	0	0	0	0
981753	JOBS - TACOMA/STA	100	0	0	0	0	0	0
		-45	0	0	0	0	0	0
981754	JOBS - TACOMA/72N	110	0	0	0	1	0	0
		0	0	0	0	0	0	0
981755	KB/152ND & MERIDIA	10	15	2	0	5	0	0
		-5	-7	-2	0	-1	0	0
981756	KB/19TH & UNION	40	50	2	0	10	0	0
		-14	-21	-1	0	-9	0	0
981757	KB/72ND & PORTLAN	35	65	2	0	5	0	0
		-5	-18	-2	0	-4	0	0
981758	KB/84TH & PACIFIC	30	55	2	0	10	0	0
		0	-23	-2	0	-8	0	0
981759	KB/BONNEY LAKE	15	15	1	0	2	0	0
		-8	-1	-1	0	-2	0	0
981760	KB/EDGEWOOD	5	10	1	0	2	0	0
		0	-3	-1	0	-2	0	0
981761	KB/FIFE	15	15	1	0	2	0	0
		-8	-10	-1	0	-1	0	0
981762	KB/FIRCREST	30	55	2	0	10	0	0
		-15	-2	-2	0	-5	0	0
981763	KB/GIGHARBOR	10	15	2	0	5	0	0
		-4	-9	-2	0	-1	0	0

APPENDIX E-5

Preliminary Sound Transit TVM and TOM Data and Message Formats & Sample Reporting Requirements

Vending Machine or Ticket Office Machine - Preliminary Data and Message Format Specification

(Excerpt from Appendix A, Data and Message Format Specification, from the Sound Transit Fare Collection RFP No. RTA/CR 28-98, Technical Specifications, Book 2 of 3, dated October, 1998)

All card load/reload operations require that the card itself is verified as valid. Card validation may be authorized locally, by checking that the card is not on the hot card file. The vending machine or ticket office machine is given key transaction management responsibility. The CDCS is not required in the communications flow, but may participate for other operational reasons, such as communications concentration.

Message formats from the vending device up to the CDCS shall follow the VEI formats with “RFC” extensions. Cash transactions may be authorized locally at the vending device. Credit/debit transactions shall be processed as described in Section 3.8 of the Technical Specifications. All transaction and operational data is transferred to the CDCS on a polled basis as specified in Section 4.4 of the Technical Specifications. Once the RFC program is implemented, all transaction data shall be forwarded to the RFC ACH at the end of the day in accordance with the clearing requirements of the RFC system (future).

4.1 Add Value Request

The following is an example of the data elements the vending device must record or forward, as required by the type of transaction, for every transaction. For transactions that are not authorized locally, this data flows upstream to the CDCS where it will either be directly authorized or converted to an EFT message, according to ISO standard rules for authorization messages.

4.1.1 Add Value Base Request Format

The VEI format for the request is:

Data Element	Field Type	Comments
Message Header ¹	RecMessageHeader	Identifies type of transaction, ID=“AUTH,” Type=“Q”
Transaction Date & Time	RecDateTime	
Device’s Transaction ID	ValTransactionID	Transaction Sequence Number
Card Track List	RecCardTrackList	Tracks from Credit / Debit Card
Encrypted PIN Block	ValEncryptedPIN	On-line Debit Cards only
Terminal Serial Number	Positive Integer	Serial number of add value terminal

¹ There is a need for a “Format Version Number” to handle future message format changes, when multiple message formats may exist within a system for some transition period of time. This is a single character field, but belongs logically in the message header.

Data Element	Field Type	Comments
Key Serial Number	ValKeySerialNumber	On-line Debit Cards only
Amount of Transaction	ValMoney	Amount to be authorized
List of Sales Items	RecSalesItemList	Zero
Payment Type	ValPaymentType	Cash, Credit, Debit
Additional Attributes	RecAdditionalAttributeList	Smart card data is placed in this field

4.1.2 Elements within “Additional Attributes”

This segment holds system proprietary data associated with the Add Value function. It is used to define the “Additional Attributes” component of the VEI request record.

Data Element	Name	Field Type	Comments
Log Record Sequence	_CAA001	ValRecordSequence	Record sequence number from Log File
Card Number	_RFC250	RFCRecCardNo	From card requesting load/add fare
Process Code	_RFC251	RFCProcessCode	Defines transaction in detail
Current Stored Value	_RFC252	RFCValDollar3	Stored value after most recent transaction
Ride or Pass Providing Agency	_RFC253	RFCValAgency	Pass or Stored Ride purchase
Pass Expiration Date	_RFC254	RFCValDate	Pass only
Rides Stored	_RFC255	RFCValRides	Stored rides only
Dispensing Agent	_CAA041	Positive Integerdefined	Agent owning fare add machine

4.1.3 Add Value Request Processing

The vending device builds the request message and sends it to the CDCS. Whatever communication path that is taken, data shall be unalterable within the request except at the vending device and the CDCS. Once the CDCS gets the request, it is captured and either authorized directly, e.g., any on-line cash purchases, or it is reformatted and sent to another party (bank or network), e.g., credit/debit transactions requiring on-line authorization. The formats of the financial request and response are controlled by the bank or network designated for authorization, following ISO 8583 rules. Since considerably more data is necessary to reverse an EFT transaction if the vend fails or the customer cancels, the CDCS must store transaction information and use a “Transaction Authorization Number” to retrieve the EFT transaction to format a reversal.

4.2 Add Value Response

When a load transaction is authorized or denied, a response message is used to communicate the authorization (or denial, if necessary) to the vending device.

4.2.1 Response Format

The VEI format of a financial response is created at the CDCS. The following is an example of the data elements returned to the card load machine. Note: the Transaction

Authorization Number *must* be set by the CDCS in order to handle transaction reversals in the VEI format.

Data Element	Type / Attributes	Comments
Message Header	RecMessageHeader	Identifies type of transaction, ID="AUTH," Type="R"
Request Approved/Denied	Boolean	
Authorization Denial Reason	ValFailureReason	Only if denied
Transaction Date & Time	RecDateTime	
Device's Transaction ID	ValTransactionID	Transaction Sequence Number
Payment Card Account Number	ValCardAccountNumber	PAN from card track (for receipt)
Transaction Authorization Number	ValTransactionID	Trace number from CDCS
Bank Authorization Number	ValTransactionID	Authorization trace from bank
Additional Attributes	RecAdditionalAttributeList	Smart card data is placed in this field

4.2.2 Elements within "Additional Attributes"

This segment holds system proprietary data associated with the Add Value Response. It is used to define the "Additional Attributes" component of the VEI response record

Data Element	Name	Field Type	Comments
Amount of Transaction	_CAA006	RFCValDollar3	Approved amount for transaction
Card Expiration Date	_CAA030	RFCValMonth	First load of smart card only

4.2.3 Add Value Response Processing

An authorization can be resolved locally at the CDCS, or it can be translated from an EFT-formatted response from an external authorizer. The authorizing bank or network, following ISO 8583² rules, controls the format of the external financial response.

When the CDCS determines the authorization status, it formats the VEI response and sends it to the vending device.

4.3 Alternate Add Value Advice Processing

If add value transactions such as cash sales are authorized locally (at the vending device), they must be stored at the vending device and forwarded at the end of day to the CDCS.

Data Element	Field Type	Comments
Message Header	RecMessageHeader	Identifies type of transaction, ID="CAPT," Type="A"

² The data from the Add Value Request includes the necessary variable data to format the ISO messages, given additional constant data stored in the CDCS. The CDCS must maintain certain constant information such as location descriptions and bank numbers associated with all the program participants. ISO mapping tables will be supplied later. Credit card and off-line debit transactions map into 0100 requests. On-line debit card requests map into 0200 requests. The corresponding responses from the bank or network are mapped to Add Value responses. The CDCS will perform "host data capture" for credit transactions, so that the Add Value flows are identical for all forms of tender.

Transaction Date & Time	RecDateTime	
Device's Transaction ID	ValTransactionID	Transaction Sequence Number
Amount of Transaction	ValMoney	Amount that was authorized
List of Sales Items	RecSalesItemList	
Payment Type	ValPaymentType	Cash, Credit, Debit
Additional Attributes	RecAdditionalAttributeList	Card data is placed in this field (See 1.2 above)

4.4 Add Value Exceptions

If the vending device fails or the customer cancels the transaction before the authorization response reaches the vending device, the vending device shall initiate a cancel transaction triggering a series of events to ensure that the customer will not be charged. In the first scenario, the authorization response has not yet been received by the CDCS from an external network (bank, financial network) by the time a cancel transaction is sent from the vending device to the CDCS. In this case, the CDCS is responsible for formatting a transaction reversal and sending the reversal to the external financial network or bank. The CDCS shall also respond to the vending device to confirm the cancellation.

In the second scenario, the authorization response has been received by the CDCS but has not yet traversed the network to the vending device when a cancel transaction is sent from the vending device. The vending device both requests a cancel and receives the authorization. In this situation, the vending device is responsible for formatting a reversal that will flow back through the CDCS to the consumer's account. If a cash sale was authorized at the CDCS, the CDCS must be notified, so that the transaction capture file is properly updated. Cash transactions are removed from the transaction capture file.

4.4.1 Add Value Cancel Format

The following is an example of the data elements the vending device sends to the CDCS for cancellation of an in-process transaction.

Data Element	Type / Attributes	Comments
Message Header	RecMessageHeader	Identifies type of transaction, ID="CANC", Type="Q"
Device's Transaction ID	ValTransactionID	Transaction sequence number

4.4.2 Add Value Cancel Response

The cancellation response message is returned by the CDCS to the vending device.

Data Element	Type / Attributes	Comments
Message Header	RecMessageHeader	Identifies type of transaction, ID="CANC", Type="R"
Request Accepted	Boolean	
Capture or Cancel Failure Reason	ValFailureReason	Only present if RequestAccepted = False

4.4.3 Add Value Reversal Format

The following is an example of the data elements the vending device sends to the CDCS for reversal of an approved transaction.

Data Element	Type / Attributes	Comments
Message Header	RecMessageHeader	Identifies type of transaction, ID="REVE," Type="Q"
Transaction Authorization Number	ValTransactionID	Trace number from CDCS
Amount to be reversed	ValMoney	Must not exceed amount of original transaction
Reversal Reason Code	ValReversalReason	Reason code for reversing transaction

4.4.4 Add Value Reversal Response

The reversal response message is returned to the vending device by the CDCS.

Data Element	Type / Attributes	Comments
Message Header	RecMessageHeader	Identifies type of transaction, ID="REVE," Type="R"
Request Accepted	Boolean	
Capture or Cancel Failure Reason	ValFailureReason	Only present if RequestAccepted = False

4.5 Printed Receipt for Add Value

The following is an example of the data elements on the customer receipt. This data meets the minimum requirements for Regulation E, governing EFT transactions.

Data Element	Attributes	Comments
ID of Terminal Used		Unique ID within smart card for device printing receipt.
Transaction Sequence Number		Same as request
Card Serial Number		From card receiving load/add fare
Transaction Description		Describes type of transaction: value, pass, rides
Amount of Transaction	RFCValDollar3	Approved amount for transaction
Payment Card Reference		Rightmost 4 digits of payment card number (if card used)
Response Code	ValFailureReason	Approval or Denial Code
Expiration Date	RFCValMonth	Meaning of expiration date depends upon whether card or pass or stored rides were purchased in this transaction. (Stored Value expiration has the card's expiration date.)

4.6 Advice Processing to Regional Fare Card CDCS

At the end of day, the CDCS shall send all transactions for Regional Fare Card to the Regional Fare Card Clearing House for distribution to Issuers and recording on the Issuer card databases. The appropriate message formats presented in above sections shall apply.

Sound Transit CDCS Data Analysis and Report Generation

(Excerpt from Section 4.6 of the Sound Transit Fare Collection RFP No. RTA/CR 28-98, Technical Specifications, Book 2 of 3, dated October, 1998)

The CDCS shall provide for data analysis and reporting. A database of all data transferred from TVM/TOM/HCR/FTP to the CDC shall be available for the production of reports according to the user's access authorization level. Menu driven report generation software shall be provided to allow the user to design, store and edit an unlimited number of report formats to be used for generation of system reports. The database engine shall be the most current version of Oracle, Sybase, Informix or approved equal.

Daily, weekly, monthly, quarterly, and annual data shall be maintained by the system for printing periodic reports. It shall be possible to designate any established report to automatically be generated and printed by the CDCS at the CDC following data uploads from the TVMs/TOMs/HCRs/FTPs, or at any other specified intervals, based upon calendar date and time of day to the hour.

The CDCS shall also indicate to the user when data used to generate a report or query is incomplete. Notice of the missing data shall be printed on any report(s). The CDCS shall have the ability to automatically merge missing data received at a later time with the appropriate data file.

4.6.1 Standard Reporting

Authorized systems users shall have the option of routing standard report outputs to a screen, a downloadable file, a temporary file for subsequent use, or to a printer. Preprogrammed reports shall be generated by the report generating package provided. Menus and screens to support the generation of reports as well as the timing and location of the resulting output shall be provided. The need for historical data requires the system to have the ability to produce reports that span two or more changes in fare structure or level without special programming.

Standard reports shall include, at a minimum, the following:

- (a) **Events Log:** A detailed listing of all events with machine number, location, date, time, and employee number and authorization
- (b) **Transaction Log:** A detailed listing of all transactions, with machine number and location, date, time and payment type, along with the total number of transactions, total escrow (if used), and total ticket sales value
- (c) **Credit/ATM Card Transaction Log:** A detailed listing of all credit/ATM card transactions, with machine number and location, date,

time, card type, and authorization codes, along with the total number and value of credit/ATM transactions

- (d) **Ticket Summary Report:** A report showing the total number of customer transactions by ticket/fare type on a daily basis, for a specified number of days
- (e) **Sales Summary Report:** Summary report of total sales, total transactions, total tickets vended and average fare of tickets vended on a daily basis, for a specified number of days (initially set to monthly)
- (f) **Recovered Money Report:** Detailed list of all recovered moneys at a TVM with machine ID number, employee ID number, date, time and amount of recovered money
- (g) **Replenished Money Report:** Detailed list of all replenished moneys at a TVM with machine ID number, employee ID number, date, time and amount of replenished money
- (h) **TVM/TOM Cash Sales Report:** Summary report of total amount of cash sales in a designated time period (initially set to calendar month) by station location, and summarized for the entire system
- (i) **Component Failure Report:** A report listing the assembly failures, type of defect time and date of failure, machine ID, component ID (if applicable), and reconciliation method (machine cleared, or maintenance personnel entry/action)

A maximum of ten (10) additional reports to be generated by the CDCS upon system startup shall be specified by ST by the time of the Preliminary Design Review. Suggested report formats shall be submitted for ST review and approval (PDR 35, FDR 12). Reports shall provide a title heading on the top of each page indicating the date and time of day when the report was requested. Reports containing data from TVMs/TOMs/HCRs/FTP shall also identify the date for which the data apply.

4.6.2 Data Analysis and Report Design Options

The report-generating package shall also permit the user to design reports requiring various data selection, subtotal, and sort options, including the linking of data fields in various reports. The system shall facilitate analysis of historical usage patterns and component, TVM/TOM/HCR/FTP, and network reliability rates (e.g., MTBFs, time between failures, availability). The user shall also be permitted to design reports requiring user inputs along with automatically downloaded data (e.g., for comparison of TVM-reporting vault values and those reported by the revenue servicing provider's count room). The user shall be able to select, summarize, and sort various data by a variety of associated fields such as station, fare device number, employee number, time period, and component type using standard report selections and Structured Query Language (SQL).

The Contractor shall develop a matrix of various types of statistical data generated by the TVM/TOM/HCR/FTP and the associated selection, subtotal, and sort options available for data analysis and report generation at the CDCS. This matrix shall be submitted to ST for review and approval (PDR 36, FDR 13).

APPENDIX E-6

Washington State Ferries POS Data Requirements

POS Data Requirements

This document describes the data required by POS. This data is currently fed from the POS Sales module and supporting programs. If “sales” are made through another mechanism, for instance Electronic Fare Collection, this data is still required to fulfill the POS data requirements for generating reports and extracts to down-line systems.

POS recording and reconciliation is done on a “Sales Date” basis. A Sales date may cross calendar dates. Individual Sales Transactions are recorded against a Shift, which is always contained entirely within a Sales Date, and therefore, which day the sale is to be accounted, and a User Session, which indicates when the sale was actually entered (for instance, off-line sales may be entered during a different day than that for which they will be accounted in the case of a system down).

All of this information is required to allow POS to complete the processing and extraction of the sales information.

User Session table

A User Session consists of the following information:

Session ID	A unique ID across the POS system.
Username ID	Username of session owner (must be in Username table)
Session Start Date/Time	Start time of session
Session End Date/Time	End time of session
Workstation Device ID	Identifies the physical location of the user for this session. Must be in Workstation Device table
POS Database ID	Identifies which database original record is entered into
Sales Date	Sales Date
Privilege ID	Attendant, Seller, etc. Must be in Privilege table

Workstation Device table

Table which describes user's physical location, Terminal, and Print Queue.

Workstation Device ID	Unique identifier
Server ID	Terminal Server identification
Port ID	Terminal Server Port identification
Terminal ID	Which WSF terminal this server/port is associated with
Print Queue	Which printer anyone at this location should have reports printed to

Privilege table

Username table

Associates a VMS Username with an Employee

Username ID	VMS Username
Employee ID	Employee's ID – must be in Employee table

Employee table

Employee ID	Employee's ID
First Name	Employee's first name
Last Name	Employee's last name
Active Flag	Y if employee is currently active

Shift table

The shift table describes an employee's shift. A shift has an Initial Declare and an optional Final Declare. A shift may be reconciled.

Shift ID	Unique across the POS system
Start Shift Date/Time	Start of shift
Initial Declare Date/Time	Time of Initial Declare (details recorded in Initial Declare table)
Final Declare Date/Time	Time of Final Declare (details recorded in Media Declare and Inventory Declare tables)
Final Declare Session ID	ID of User Session for Final Declare
Station ID	User's Station
Sales Date	Sales Date for Shift

Initial Declare table

Media Declare table

The Media Declare table records the amounts of all media at the end of the Shift

Shift ID	Associates this record with the correct shift.
Media Type ID	Type of Medium used for payment, e.g., cash, Canadian, Check, etc.
Final Declare Media Amount	\$ amount on hand for this medium at end of shift

Sales Transaction table

Each sale is recorded as a Sales Transaction. A Sales Transaction and its subsidiary records describes when the transaction occurred, details of what was sold, and details of how the sale was paid for. Subsidiary tables are Ticket Log, Payment Log, and Special Function Log. The Special Function log contains details of non-sale transactions, e.g., ticket price lookup, Canadian equivalency, etc.

Sales Transaction ID	Unique ID
Session ID	User Session ID for this sale
Sale Start Date/Time	Start time of sale

Sale End Date/Time	End time of sale
Sales Transaction Type ID	Sale, Voidout, Refund, Offline Sale, Voidout, Refund
Shift ID	Shift ID for this sale

Ticket Log table

The Ticket Log table contains details of the individual items within a sale.

Sales Transaction ID	Identifies which sale this item is associated with
Ticket Date/Time	Time this line item was entered
Terminal Route Fare ID	Unique descriptor of this item
Ticket Count	Quantity sold
Scheduled Departure Time	Time of departure for this item
Actual Price Amount	Price of 1 unit
Serial Number	serial number of ticket book

Payment Log

The Payment Log records details of the type of payment received for each Sales Transaction. It has subsidiary tables for some types of payments that record more details about that payment. For instance, if the payment is by check, details of the checking account are recorded. Likewise, a charge also records details of the charge account number.

Sales Transaction ID	Ties this Payment Log entry to the correct Sales Transaction
Payment Date/Time	Time payment is made
Media Type ID	What medium is used for payment (may be multiple for one Sales Transaction)
Payment Amount	US currency amount of payment.